

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031347 A1

(51) International Patent Classification⁷: **G01N 33/50**,
A61P 35/00, 9/10, 3/10, 25/00

(21) International Application Number:
PCT/GB2004/004060

(22) International Filing Date:
27 September 2004 (27.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0322689.1 27 September 2003 (27.09.2003) GB

(71) Applicant (for all designated States except US): **MEDICAL RESEARCH COUNCIL** [GB/GB]; 20 Park Crescent, London W1N 4AL (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIMBER, Wendy**,
A. [GB/GB]; MRC Protein Phosphorylation Unit, School

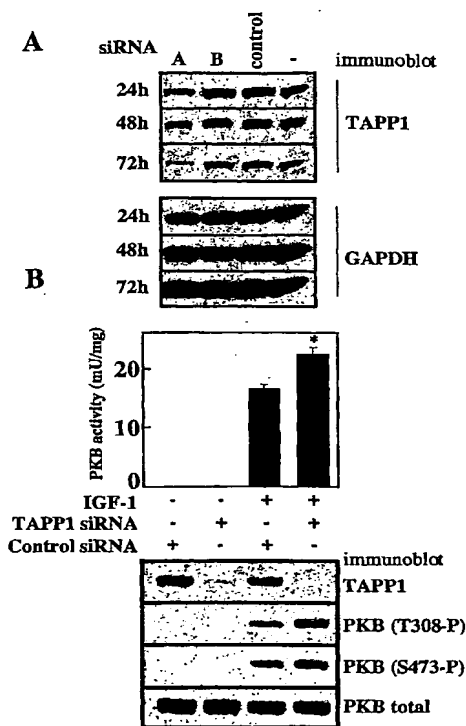
of Life Sciences, University of Dundee, Dow Street, Dundee DD1 5EH (GB). **ALESSI, Dario, R.** [GB/GB]; MRC Protein Phosphorylation Unit, School of Life Sciences, University of Dundee, Dow Street, Dundee DD1 5EH (GB).

(74) Agent: **PILKINGTON, Stephanie**; Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: METHODS



(57) Abstract: A method for identifying a compound for modulating the cellular activity or location of PTPL1, comprising the step of identifying a compound that modulates the interaction of TAPP with PtdIns(3, 4)P₂; or which modulates or mimics the interaction of TAPP with PtdIns(3, 4)P₂; or which modulates the cellular location of TAPP. A method of treating a patient with diabetes or in need of inhibition of apoptosis, for example in the treatment of ischaemic disease, wound healing or nerve regeneration, wherein the patient is administered an effective amount of a compound that inhibits the interaction of PtdIns(3, 4)P₂ with TAPP or that inhibits the interaction of TAPP with PTPL1. A method of treating a patient in need of promotion of apoptosis, for example in treating cancer or in the resolution of inflammation, wherein the patient is administered an effective amount of a compound that promotes the interaction of TAPP with PtdIns(3, 4)P₂ or that mimics the effect of PtdIns(3, 4)P₂ on TAPP, or that promotes the interaction of TAPP with PTPL1.

BEST AVAILABLE COPY

WO 2005/031347 A1



(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.